

KOLOSOV, Sergey Petrovich, kand.tekhn.nauk, dotsent

Design of automatic devices with nonlinear elements by a method
which involves the alignment of characteristics. Izv.
vys. ucheb. zav.; elektromekh. 4 no.4:94-104 '61.

(MIRA 14:7)

1. Moskovskiy aviatsionnyy institut.
(Automatic control)
(Amplifiers(Electronics))

KOLOSKOV, S.P.

Continuous system developed by the Central Scientific Research
Institute of the Distilling Industries for the growing of mold
fungi with the surface method. Trudy TSNIISP no. 13:44-54 '62.
(MIRA 17:5)

38629

S/143/62/000/006/005/008
D238/D308

9.6/30

26.15/2

AUTHOR: Kolosov, S. P., Candidate of Technical Sciences, Docent

TITLE: Problems of the design of non-linear electrical circuits with photoelectric converters

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 6, 1962; 45-50

TEXT: A study is made of parametric photoelectric converters (those whose resistance varies under the influence of electromagnetic irradiations). The most suitable characteristic is a family of voltampere curves of a given type of photoelectric cell taken for different intensities of irradiation E_1 . The simplest approximations are based on the substitution of the relatively linear sections of the voltampere curves by straight lines. For the point photodiode an approximation can be used in the form:

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Problems of the design ...

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$$I_{ph} = I_0 + kE_{in} + U_{ph}/r_{iph} \quad (1)$$

where I_{ph} is the current through the photodiode; U_{ph} - the voltage drop at the photodiode; I_0 - a section cut off for the current axis by the rectified characteristic corresponding to zero input signal; $E_{in} = 0$; $K = \frac{\Delta I_{ph}}{\Delta E_{in}}$ (for $U_{ph} = \text{const}$); $r_{iph} = \tan \rho = \frac{\Delta U_{ph}}{\Delta I_{ph}}$ (for $E_{in} = \text{const}$). For vacuum photocells, plane photodiodes and plane phototriodes, the last term on the right-hand side of Eq. (1) can be disregarded. The voltampere curves of a gas-filled photocell can be approximated to a family of straight lines passing through origin of the coordinates

Card 2/3

Problems of the design ...

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$$U_{ph} = r_{iph0}(1 - kE_{in})I_{ph}$$

where r_{iph0} is the internal differential resistance of the gas-filled photocell with zero input signals. The voltampere curves of photo-resistors can be approximated by

$$U_{ph} = 1/(g_{ph0} + n m \sqrt{E_{in}})I_{ph}$$

The approximations are illustrated by two examples. There are 4 figures.

ASSOCIATION: Moskovskiy aviatsionnyy institut imeni S. Ordzhonikidze (Moscow Order of Lenin Institute of Aviation imeni S. Ordzhonikidze)

-SUBMITTED: May 15, 1961

Card 3/3

S/170/62/005/009/008/010
B104/B102

AUTHORS: Kolosov, S. P., Ostryakov, I.A., Smirnov, V. A., Shelenkov, V. M.

TITLE: Current-conducting polymers as thermistors

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 9, 1962, 85 - 89

TEXT: Thermoelectric characteristics of 16 different current conducting polymers as determined experimentally are given. The characteristics of other polymers are similar to these. Two groups of specimens were studied: (1) based on mixtures containing a constant weight of filler with varying weights of polyisobutylene and/or polyethylene; (2) based on mixtures containing constant weights of polyisobutylene and/or polyethylene with varying weights of fillers. The specimens in the first group were of the type П-85X (P-85Kh), П-118X (P-118Kh) etc., those in the second group: C-50X (S-50Kh), C-60X (S-60Kh) etc. Using the analogy between thermistors and polymers, the design of current circuits with conducting polymers is discussed and relations for the behavior of the thermopolymers under transient conditions are derived. There is 1 table. ✓

Card 1/2

Current-conducting polymers as ...

S/170/62/005/009/008/010
B104/B102

ASSOCIATION: Aviatsionnyy institut imeni Sergo Ordzhonikidze, G. Moskva
(Aviation Institute imeni Sergo Ordzhonikidze, Moscow)

SUBMITTED: April 21, 1962

Table. Resistance r in ohms and resistivity ρ in ohm \cdot cm at different
temperatures θ in $^{\circ}\text{C}$.

Card 2/2 Z

KOLOSOV, S.P., kand.tekhn.nauk, dotsent

Problems concerning the design of nonlinear electrical networks
containing photoelectric converters. Izv. vys. ucheb. zav.; energ. 5
no.6:45-50 Je '62. (MIRA 15:6)

1. Modkovskiy ordena Lenina aviatsionnyy institut imeni S.Ordzhonikidze.
(Photoelectric cells) (Electric networks)

KOLOSOV, S.P.; OSTRYAKOV, I.A.; SMIRNOV, V.A.; SHELENKOV, V.M.

Using current-conducting polymers as thermistors. Inzh.-fiz.zhur.
5 no.9:85-89 S '62. (MIRA 15:8)

1. Aviatzionnyy institut imeni Sergo Ordzhonikidze, Moskva.
(Thermistors) (Polymers)

PHASE I BOOK EXPLOITATION

SOV/6413

Kolosov, Sergey-Petrovich

Elementy aviatsionnykh avtomaticheskikh ustroystv (Elements of Aircraft Automatics) 2d ed., rev. and enl. Moscow, Oborongiz, 1963. 462 p. 10,000 copies printed.

Reviewer: B. S. Sotskov, Corresponding Member, Academy of Sciences USSR; Ed.: D. V. Sveharnik, Doctor of Technical Sciences; Ed. of Publishing House: L. I. Sheynfayn; Tech. Ed.: V. P. Rozhin; Managing Ed.: G. I. Shteynberg, Engineer.

PURPOSE: This is a textbook for students of aeronautical engineering schools of higher education specializing in aircraft automatics. It may also be of interest to aeronautical production engineers.

COVERAGE: The book is intended to be used for a course in the elements of aircraft automatics and includes information on the arrangement, theory, and design of mechanical, electromechanical,

Card 1/6
2

Elements of Aircraft Automatics

SOV/6413

ferromagnetic, electronic, semiconductor, and other elements of automatic systems. Sample calculations are provided for major sections of the book. Considerable attention is given to dynamic properties of component elements and the effect of operational conditions on the stability of their parameters, as well as to methods of design and means of improving their reliability. The problem of linking the controllers with digital computers is discussed briefly. The author thanks V. P. Kononov and P. A. Kononov, Candidates of Technical Sciences, D. V. Svecharnik, Doctor of Technical Sciences, B. S. Sotskov, Corresponding Member of AN SSSR, and B. N. Petrov, Academician, for their advice in preparing the book for publication; thanks are also expressed to A. S. Abramov and V. A. Ryabov, Doctors of Technical Sciences, B. S. Voronkov and Yu. I. Konev, Candidates of Technical Sciences, as well as to department staffs directed by I. Ye. Mitrofanov and P. A. Persianov, Candidates of Technical Sciences, V. A. Pavlov, Doctor of Technical Sciences, for valuable remarks on the first edition of the book. There are 15 references, all Soviet (one translation).

Card 2/6
7-

KOLOSOV, S.P., doktor tekhn.nauk, prof.

Calculation of electrical networks containing thermistors using an
internal feedback technique. Izv. vys. ucheb. zav.; energ. 6
no.10:122-125 0 '63. (MIRA 16:12)

1. Moskovskiy aviatsionnyy institut imeni S.Ordzhonikidze.

KOLOSOV, S.P., doktor tekhn. nauk; SMIRNOV, V.A., inzh.

Static characteristics of a hydraulic amplifier with a jet pipe
and standard load. Trudy MAI no.155:60-71 '64. (MIRA 17:11)

KOLOSQV, S.P., doktor tekhn. nauk; PUTINSEV, V.A., inzh.; SMIRNOV, V.A., inzh.;
SHELENKOV, V.M., inzh.

Calculation of reversive networks with a.c. power supply. Trudy MAI
no.155:90-109 '64. (MIRA 17:11)

KOLOSOV, S.P., doktor tekhn nauk; OSTRYAKOV, I.A., inzh.; SMIRNOV, V.A., inzh.;
SHELENKOV, V.M., inzh.

Calculation of circuits with current conducting polymers. Trudy MAI
no.155:120-131 '64. (MIRA 17:11)

SOTSKOV, Boris Stepanovich. DOMANSKIY, B.I., prof., doktor
tekhn. nauk, retsenzent; KOLOSOV, S.P., prof., doktor
tekhn. nauk, retsenzent; NEFEDOVA, V.I. dots., kand.
tekhn. nauk, red.

[Principles of the calculation and design of electro-
mechanical components of automatic and remote control
systems] Osnovy rascheta i proektirovaniia elektro-
mekhanicheskikh elementov avtomaticheskikh i telemekha-
nicheskikh ustroystv. Moskva, Energiia, 1965. 575 p.
(MIRA 18:9)

KOLOSOV, S.S.; PRUCHANSKIY, V.S.

Methodology of calculating cross sections of the body in
planning radiotherapy of tumors of organs in the thoracic cavity.
Med. rad. 9 no.11:62-64 N '64. (MIRA 18:9)

1. Rentgenodiagnosticheskiy otdel (zav. K.B. Tikhonov) TSentral'nogo
nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta
Ministerstva zdravookhraneniya SSSR, Leningrad.

TIKHONOV, K.B.; KOLOSOV, S.S.; PRUCHANSKIY, V.S.

Röntgenological methods in the practice of planning radiotherapy.
Med. rad. 10 no.1:70-74 Ja '65. (MIRA 18:7)

1. Tsentral'nyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy
institut Ministerstva zdravookhraneniya SSSR, Leningrad.

KOLOSOV, V. A.

Growing labor productivity in mechanized mines. Mast.ugl.4 no.10:
3-5 0 '55. (MIRA 9:1)

1.Nachal'nik tekhnicheskogo otdela tresta Stal'nogorskugol' kombinata
Moskvougol'.

(Coal mining machinery)

BATALIN, S.A.; BIRYUKOV, R.A.; KOLOSOV, V.A.

Forced blowing and suction method in the ventilation of
mines in the Prokopyevsk-Kiselevsk area of the Kuznetsk
Basin. Ugol' 35 no.3:54-58 Mr '60.
(MIRA 13:6)

1. Tomskiy politekhnicheskiy institut (for Batalin).
2. Kemerovskiy gornyy institut (for Biryukov).
3. Kuzbassgiprosnakht (for Kolosov).
(Kuznetsk Basin--Mine ventilation)

KOLOSOV, V.A., kand.tekhn.nauk

Advantage of changing to open cast mining in the Prokop'evsk-Kiselevsk region of the Kuznetsk Basin. Ugol' 39 no.2:21-25

F '64.

(MIRA 17:3)

1. Sibgiproshakht.

KOLOSOV, V.A., kand.tekhn.nauk

Advantage of changing to open cast mining in the Prokop'evsk-Kisel'evsk region of the Kuznetsk Basin. Ugol' 39 no. 2:21-25
F '64. (MIRA 17:3)

1. Silgiproshakht.

CO

22

TESTING TREATED CRACKED GASOLINES AND THEIR MIXTURES WITH STRAIGHT-RUN GASOLINES IN AN AUTOMOBILE ENGINE. V. A. PIRIOV AND V. A. KIRISOV. *Collection Repts. Motor Fuel Research, U. S. S. R. Trans. Sci. Automobile-Tractor Inst.* Issue 21, 19 34(1931) — The following gasolines were tested in a gasoline motor in the motor fuel lab. of the Sci. Automobile-Tractor Inst.: (1) Grozavul second grade automobile gasoline, (2) Baku cracked gasoline, (3) Grozavul cracked gasoline, (4) Baku second-grade gasoline and (5) motor benzene. Mixts. contg. various amts. of the above fuels were investigated. The following things were taken into consideration: (a) suitable adjustment of the carburetor; (b) performance of the motor, e. g., brake horse power, consumption of fuel per hour and per brake horsepower; (c) performance of the motor with varying amts. of fuel by means of adjustment of the fuel supply; (d) evaluation of the fuel for starting the engine; (e) antiknock properties of the fuels; and (f) continuous runs for detg. the C formation of various fuels. The general conclusion is drawn that all the fuels tested behave very much alike insofar as the brake horsepower, consumption of oil and fuel and the general performance are concerned. The oil temp. in the crank case was about the same in all expts. The only difference noticed was the quality of the C deposit formed; e. g., cracked and mixts. of cracked and straight-run gasoline produced a hard and shiny C, the layer of which was thinner than that formed by straight-run gasolines. Many tables and diagrams are given.

A. A. BOHRLINGER

ASME 34.4 METALLURGICAL LITERATURE CLASSIFICATION

KOLOSOV, V., and ZINGER, N.

Methods of Saving Gasoline in Motorized Carrier Service, Peoples'
Commissariat of Municipal Affairs RSFSR, Moscow-Leningrad, 1943.

KOLOSOV, V. A., Eng.-Major Cand. Tech. Sci.

Dissertation: "Conservation of Fuel for Transport Vehicles by Decreasing the Periods of Engine Operation Without Full Loads." Military Order of Lenin Academy of Armored and Mechanized Troops of the Soviet Army imeni I. V. Stalin, 21 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)

KOLOSOV, V. I

PA 23/49T30

USSR/Engineering
Engines, Diesel

Jul 48

"Review of Book, 'Characteristics of the Operation
of Diesels,' by G. I. Benetskiy," V. Kolosov, Engr-
Maj, 1½ pp

"Automobil" No 7

Lists various errors. Published by Voenizdat,
219 pp, 6 rubles, 50 kopeck.

23/49T30

SAMOL', G.I., kandidat tekhnicheskikh nauk; GOL'DBLAT, I.I., kandidat tekhnicheskikh nauk; KOLOSOV, V.A., kandidat tekhnicheskikh nauk, redaktor; POPOVA, S.M., tekhnicheskii redaktor

[Gas cylinder automobiles] Gazoballonnye avtomobili. Izd. 2-e, perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1953. 284 p. (MIRA 7:9)
(Automobiles--Engines (Compressed gas))

KOLOSOV, V., kandidat tekhnicheskikh nauk.

On method of gasoline economy. Avt.transp.34 no.3:21 Kr '56.
(Automobiles--Fuel consumption) (MLRA 9:7)

KOLOSOV, V., kand. tekhn. nauk.

Italian motortrucks. Art. transp. 36 no.5:36-37 My '58.

(Italy--Motortrucks)

(MIRA 11:6)

KOLOSOV, V., kand.tekhn. nauk.

Motorbus with semitrailers. Avt. transp. 36 no.9:59 S '58.

(Motorbuses)

(MIRA 11:10)

ZHIL'TSOV, V.R.; ZELENOV, A.F.; KOKIN, A.G.; KOLOSOV, V.A.;
KOROBITSYN, M.D.; MALYAVINSKIY, A.M.; NEFEDOV, Ya.D.;
PAVLOV, A.V.; STEPANOV, Yu.A., prof.; SUVOROV, V.G.;
YUSHIN, S.I.; POCHTAREV, N.F., kand. tekhn. nauk, inzh.-
polkovnik, red.; KUZ'MIN, I.F., tekhn. red.

[Internal combustion engines; design and performance] Dviga-
teli vnutrennego sgoraniia; ustroistvo i rabota. [By] V.R.
Zhil'tsov i dr. Pod red. IU.A.Stepanova. Moskva, Voen. izd-vo
M-va obor. SSSR, 1955. 470 p. (MIRA 16:6)
(Internal combustion engines)

L 24203-66 FBD/EWT(1)/EEC(k)-2/T/EWP(k)/EWA(h) IJP(c) WG

ACC NR: AP6014614

SOURCE CODE: UR/0386/66/003/009/0372/0378

AUTHOR: Akhmanov, S. A.; Kovrigin, A. I.; Kolosov, V. A.; Piskarskas, A. S.;
Fadeyev, V. V.; Khokhlov, R. V.

ORG: Physics Department of the Moscow State University (Fizicheskiy fakul'tet
Moskovskogo gosudarstvennogo universiteta)

TITLE: Tunable parametric light generator with KDP crystal

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 3, no. 9, 1966, 372-378

TOPIC TAGS: laser r and d, parametric converter, parametric amplifier, frequency
control

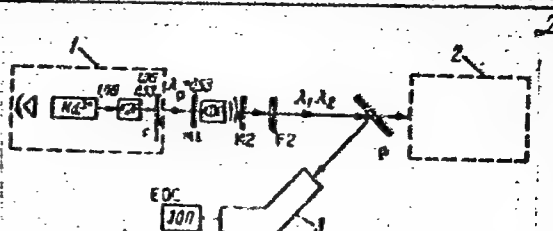
ABSTRACT: The authors present in this communication the results of an experimental investigation that has led to the construction of a continuously tunable parametric generator of coherent light waves in the region of $\lambda \approx 1 \mu$, using a KDP crystal. Continuous tuning of the wavelength was effected mechanically in a band from 9575 to 11775 Å, and the oscillation power reached several kilowatts. The frequency is tuned by rotating a nonlinear crystal in an optical resonator (Fig. 1). Such a scheme has made it possible not only to construct a generator with larger bandwidth than hitherto, but also to attain better reproducibility of the generated frequencies. The pump produced coherent oscillations at 0.53λ (second harmonic of laser with Nd^{3+}), the maximum pump power in the unfocused beam reached 30--35 Mw/cm², the pump pulse duration was 25×10^{-9} sec, and the beam divergence was $\sim 7'--8'$, with the

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ACC NR: AP6014614

Fig. 1. Block diagram of the experimental setup: M_1, M_2 -- mirrors of parametric generator, F_1, F_2 -- filters, P -- plane-parallel plate, 1 -- pump generator, 2 -- meter, 3 -- spectrograph.



length of the KDP crystal 3 cm. The theory of the parametric generator is discussed in detail. Tests have shown the degenerate parametric oscillations ($\lambda_1 = \lambda_2 = 1.06 \mu$) to occur at a pump power $P_p \geq 8-10 \text{ Mw/cm}^2$ (inside the resonator). With increasing deviation from the degenerate mode, the threshold pump power increased. Self-oscillation was manifested by the appearance of an intense signal which exceeded the indicator background by a factor of at least 10^5 ; the produced radiation had good directivity and its divergence angle did not exceed $1.5'$. At $P_p \approx 30-35 \text{ Mw/cm}^2$ the power of the parametric oscillations reached 5 kw. Tuning curves of the parametric light generator are presented and agree essentially with the presently accepted theory. The limiting tuning range is found to be determined only by the position of the absorption bands; estimates show that it should be not smaller than 4000 Å. The authors thank N. K. Podset-skaya for help with the measurements and I. V. Nizhegorodova for help with the data reduction. Orig. art. has: 3 figures and 3 formulas.

[02]

SUB CODE: 20/ SUBM DATE: 17Mar66/ ORIG REF: 006/ OTH REF: 006/ ATD PRESS:

Card 2/2 B.L.G.

4245

Kolosov, V.D.

PETROV, Yakev Petrovich; BURGUTIN, K.S., retsensent; KOLOSOV, V.D.,
retsensent; TORBOCHKIN, I.L., retsensent; KUTUKOV, G.M.,
redaktor; PITERMAN, Ye.L., redakter; KOLESNIKOVA, A.P.,
tekhnicheskij redakter.

[Steam powered vessels] Paromoteray i flot. Moskva, Gosles-
bumizdat, 1955. 306 p. (MLRA 9:1)
(Steamboats)

KOLOSOV, Vasilii Dmitriyevich; SHEVCHUK, L.V., red.; KIRZAN, G.A.,
spets. red.; MEL'NIKOV, V.I., tekhn. red.

[Experience with and prospects for rural construction] Opyt
i perspektivy stroitel'stva na sele. Omsk, Omskoe knizhnoe
izd-vo, 1959. 58 p. (MIRA 15:8)

1. Nachal'nik mezhkolkhoznoy stroitel'noy kontory Lyubinskogo
rayona, Omskoy oblasti (for Kosov). 2. Glavnyy inzhener Omsko-
go oblastnogo upravleniya po stroitel'stvu v kolkhozakh (for
Kirzan).

(Construction industry) (Farm buildings)

CHEREPANOV, Veniamin Yakovlevich; KOLOSOV, V.D., red.

[Repair of the steel bodies of vessels and machines used
in lumber floating] Remont stal'nykh korpusov lesosplay-
nykh sudov i mashin. Moskva, Lesnaia promyshlennost',
1965. 151 p. (MIRA 18:6)

9.7000

S/194/62/000/001/010/066
D201/D305

AUTHORS: Afinogenov, L. P., Yefremov, V. D. and Kolosov, V.G.

TITLE: Ferrite switching circuits based on the principle of current distribution

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 1, 1962, abstract 1-2-9g (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1960, no. 12, 24-31)

TEXT: A description of circuits, designed on the principle of current distribution, is given. They may find wide application in various switching arrangements. The described circuits are distinguished by an excellent reliability, simplicity and fast operation. The following are described: The basic circuit of a ferrite switch, its functional circuit diagram, a distributor circuit with a reduced number of ferrite elements, a cascaded distributor connection and the circuits of two cells of a shift register. 6 figures. 7 references. [Abstracter's note: Complete translation.]

VB

Card 1/1

S/194/61/000/012/030/097
D201/D303

AUTHORS: Afinogenov, L. P., Yefremov, V. D. and Kolosov, V. G.
TITLE: Counting and logic ferrite systems, based on the principle of current distribution
PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1961, 28, abstract 12B177 (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1960, no. 12, 32-42)

TEXT: The circuits of counting and logic devices are considered: Binary and decimal reversible counters, binary storage adders, decoders for 32 and 1024 outputs, a code comparison circuit and a circuit for memory code comparison. The following requirements had to be taken into consideration in designing the above circuits: 1) large signal-to-noise ratio; 2) the lack of flowing back information; 3) use of components of long-life-time; the circuit operation should not largely depend on the spread of circuit component parameters and on the supply voltage and pulse changes; 4) the

Card 1/2

Counting and logic ...

S/194/61/000/012/030/097
D201/D303

superimposition principle or compensation of signals from various
sources is inadmissible. [Abstractor's note: Complete transla-
tion.]_7

Card 2/2

EW(1)/EWA(h) Feb
AR4046129

8/4/79 14/10/1979 14/10/1979

9

1. Elektronika i izmeritel'naya tekhnika. 1963, No. 1, s. 92-95.

1. Elektronika

1. Elektronika i izmeritel'naya tekhnika. 1963, No. 1, s. 92-95.

CITED SOURCE: Uch. zap. aspirantov i soiskateley. Leningr. politekhn. in-t. Elektro-
tehn. i avtomatika. L., 1963, 92-95

1. Discrete circuit, ferrite tape bank, current distribution principle,
digital function circuit.

ABSTRACT: The article describes a new technique for constructing discrete circuits,
based on the principle of current distribution. The realization of a logical function occurs
in one circuit cycle. The method is based on a selection of the conductor arm of a
circuit containing windings of ferrite tape bank. The tape bank is magnetized
corresponding to high impedance prior to entry of input data. As input
data is entered, the ferrite bank is magnetized by them in the same direction to a level
corresponding to high impedance.

L 25343-65

ACCESSION NR: AR 4046129

The principle is clarified by using a simpler example of selecting one of two outputs when a current pulse is present in one of two inputs. Illustrated are circuits of distribution into two outputs and a circuit realizing any given logical functions of n-dyadic inputs. Circuits based on this principle offer the following advantages: 1) high speed; 2) freedom from inverse data flows; 3) outputs of high intensity and various combinations; 4) outputs can be realized with a single input; 5) direct current signals can be used at the input points. Illustrations. E. Vtyurina.

ENCL: 00

SUB CODE: EC, EE

2, 2

ACC NR: AT7004447

(N)

SOURCE CODE: UR/2531/66/000/199/0117/0135

AUTHOR: Kolosov, V. G.; Radomysl'skaya, N. I.

ORG: none

TITLE: Procedure and results of calculation of circuits based on the principle of current distribution in a wide temperature range

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 199. 1966. Meteorologicheskiye pribory i avtomatizatsiya meteorologicheskikh izmereniy (Meteorological instruments and the automation of meteorological measurements), 117-135

TOPIC TAGS: circuit theory, computer circuit, ferrite core memory

ABSTRACT: Experience has shown that the circuitry for digital systems can be presented as consisting of two circuit types: series connections of the elemental cells and connections of the pyramidal type. This is called the principle of current distribution. The authors analyze circuits based on this principle and show that circuits using four-cycle pulse systems instead of the commonly used two-cycle systems have certain advantages (such as a reduction of turns in the coils of the electromagnets and of the pulse amplitude. A calculation procedure is given for a ferrite core in the temperature range between -60 and $+50^{\circ}\text{C}$. Circuits are calculated for the maximal speed for both decimal and binary systems, and the duration of the

Card 1/2

ACC NR: AT7004447

pulses is calculated. The results of calculations were experimentally checked in the above temperature range and it was found that the circuits performed well even with variation of the current, pulse duration and voltage up to $\pm 20\%$. Orig. art. has: 16 figures and 15 equations.

SUB CODE: 09/ SUBM DATE: none

Card 2/2

1975/01/EP7-ET-10/17 Oc.-Pr.-Pec. 1975

195008196

1296/5-000/005/0070/0070

1. Stebensva, N. F.; Kolosev, V. G.; Lebedeva, L. V.; V. H.

35
B

Method for producing pressed materials from polytetrafluoroethylene.

198875

Patent izobreteniy i tovarnykh znakov, no. 198875, 1988.

polytetrafluoroethylene, plastic, thermosetting material.

Author Certificate presents a method for obtaining pressed material of polytetrafluoroethylene. In order to give the material fluidity and the working into wares by the methods of plastic treatment, the polytetrafluoroethylene with or without fillers is mixed with highly fluid thermoplastics (furan, resorcin furfural, and others or monomers such as PA monomer).

none

198875

ENCL: 00

SUB CODE: MT, OC

OTHER: 000

KOLOSOV, V. I.

28

7

Determination of sodium in calcium-sodium babbitts.
V. I. Kolosov and M. D. Trykov. *Zavodskaya Lab.* 9,
518 (1949).--Place 2-4 g. of babbitt (Ca 0.75-1.1 and
Na 0.7-1.0%) shavings in a porcelain boat and oxidize in
an O stream for 10-15 min. at 400-450° in a furnace.
Treat with 150 ml. of boiling water for 20-30 min., pass in a
stream of CO₂ for 5-10 min., boil for 5-10 min., filter and
wash 3-4 times with water. Cool the filtrate to room
temp., add methyl orange and titrate with 0.1 N HCl.
The method is as rapid and accurate as the amalgamation
method. B. Z. Kamich

ASH-STA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
COMMON ELEMENTS										PROCESSES AND PROPERTIES INDEX									
KOLOSOV, V. I.										18									
CA																			
<p>Development of a method of converting the lead slime from the production of diphenylguanidine into lead carbonate. N. N. Murach, V. I. Kolosov, and E. V. Kibel'eva. <i>J. Applied Chem. (U.S.S.R.)</i> 20, 132-43 (1947) (in Russian).--The Pb slime contained 19, 79.20, total S 0.35, and compl. sol. in H₂O and H₂O₂ 2.61%. In one method the slime is first caked and then treated with H₂SO₄ to give a 99% conversion of the sulfide to the sulfate. The product is treated with Na₂CO₃ (60% by wt. of the PbSO₄) to give 98% conversion to PbCO₃. In a second method the slime is chlorinated in molten PbCl₂ at a temp. not exceeding 460°. The PbS in the melt should not exceed eutectic compn. (20% PbS and 80% PbCl₂), and NaCl is added periodically to lower the m.p. The product is wet-ground in a mill with Na₂CO₃ to give practically complete conversion to PbCO₃. H. Z. Kamich</p>																			
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION										C-STEP 1/2/3/4/5/6/7/8/9/10									
KNOWN SUBSTANCE										REACTANT									
GROUP										CLASS									
SUBGROUP										SUBCLASS									
SUBSUBGROUP										SUBSUBCLASS									

L 16797-66 ENT(d)/EWP(1) IJP(c) BB/GG/JXT(CZ)

ACC NR: AT6005078

SOURCE CODE: UR/2563/65/000/256/0094/0101

AUTHOR: Kolosov, V.G.; Milovldov, B.A.; Radomysh'skaya, N.I.

ORG: * *none*

16C44
TITLE: The prospects of digital circuits based on the principle of current distribution in circuits with increased speed and temperature stability *48 B+1*

SOURCE: * Leningrad. Politekhnikheskiy institut. Trudy, no. 256, 1965. Tsifrovyye izmeritel'nyye i upravlyayushchiye ustroystva (Digital measuring and control devices), 94-101

TOPIC TAGS: digital system, computer component, logic element, circuit reliability

ABSTRACT: The authors analyze theoretically the various types of circuits based on the principle of current distribution (PCD) and establish the basic pertinent relationships. Methods for circuit calculations (temperature dependence, maximum speed, minimum pulse duration, maximum frequency) of transistorized and ferrite-core containing units are developed and applied to a specific example of a standard fast, reliable unit and a PCD transmitting cell in four-cycle operation. This four-cycle cell operates with useful

Card 1/2 *2*

L 16797-66

ACC NR: AT6005078

loads which are only one quarter of the load found under two-cycle operating conditions. This leads to a decrease in the number of triodes used, and the intensity of currents. The resulting digital elements are thus more reliable. Orig. art. has: 14 formulas, 6 figures, and 3 tables. 0

SUB CODE: 09 / SUBM DATE: none
05/

Card 2/2 SM

GRISHAYEV, I.A. [Hryshalev, I.O.]; KOLOSOV, V.I.; MYAKOTA, V.I.
[M'iakota, V.I.]; YAKIMOV, B.V. [Iakymov, B.V.]

Eliminating the effect of a harmful magnetic field component
in a magnetic undulator. Ukr.fiz.shur. 4 no.6:810-812 N-D '59.
(MIRA 14:10)

1. Fiziko-tekhnicheskii institut AN USSR.
(Magnetic fields) (Magnetic instruments)

9.3260

68805

AUTHORS: Grishayev, I. A., Kolosov, V. I., S/020/60/131/01/016/060
Myakota, V. I., Beloglazov, V. I., B013/B007
Yakimov, B. V.

TITLE: The Experimental Determination of the Power of the Submilli-
meter Range in a Magnetic Undulator

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 1, pp 61 - 63
(USSR)

ABSTRACT: The present paper describes the preliminary results obtained by
determining the summational mean power of the electromagnetic
oscillations¹⁾ of the submillimeter range. The power to be de-
termined is emitted by relativistic 17 Mev electrons in a mag-
netic undulator. With an average electron amperage of 4 μ a,
 $\sim 10^{-7}$ w was obtained for the level of the mean power. The pro-
duction of a radiation in the tenth-of-a-millimeter range and
in the submillimeter range is of great practical interest. Such
electromagnetic oscillations can at present be produced only by
means of spark generators and heated bodies. However, the power
levels obtained in this way are very low. The undulatory method
of producing high-frequency oscillations, which is based upon

Card 1/4

68805

The Experimental Determination of the Power of the S/020/60/131/01/016/060
Submillimeter Range in a Magnetic Undulator B013/B007

using the double Doppler-effect of frequency transformation, makes it possible to bridge the entire range of electromagnetic oscillations from 1 mm to visible light. The level of the emitted power may actually be made sufficiently large, even in the case of an incoherent radiation. For the frequency of radiation in a magnetic undulator for the free space $\nu = \nu_0 / [1 - \beta \cos \vartheta]$ holds. Here ν denotes electron velocity, ν_0 - the period of mag-

netic structure; $\beta = v/c$; ϑ - the angle between the direction of motion and the direction towards the observer. The production of electromagnetic oscillations may, in a sufficiently wide frequency-range, be determined by measuring electron energy (with constant ν_0). The undulator used in the present paper con-

sists of separate electromagnets, in which it was possible to eliminate completely the harmful components of the magnetic field. 90% of the input amperage passed through the entire undulator. With the wave guide dimensions used here, a discrete spectrum of electromagnetic oscillations was obtained because of the difference of the excited oscillations. This spectrum is subdivided into the two principal ranges of 100 to 250 μ and

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The Experimental Determination of the Power of the
Submillimeter Range in a Magnetic Undulator

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B013/B007

50 to 67 μ . The main part of the lines produced is in the latter range. At present, measurements of the entire power of radiation of the entire spectrum investigated are being carried out, and preparations are made for recording the spectrum. Figure 1 shows the scheme of the device. The elimination of background is briefly dealt with. The power of electron radiation in the undulator is proportional to H^2 , and therefore $\frac{P(H_1)}{P(H_2)} = \frac{H_1^2}{H_2^2}$ holds. Herefrom and from an other equation it is possible

to calculate the absolute amount of radiation intensity for a given magnetic field. The results obtained by the measurements are given in table 1. The authors thank K. D. Sinel'nikov, Academician of the AS UkrSSR, for the suggested theme, and Ya. B. Faynberg for discussing the results obtained. There are 1 figure, 1 table, and 3 references.

Card 3/4

68805

The Experimental Determination of the Power of the Submillimeter Range in a Magnetic Undulator S/020/60/131/01/016/060
B013/B007

ASSOCIATION: Fiziko-tekhnicheskii institut Akademii nauk USSR (Institute of Physics and Technology of the Academy of Sciences of the UkrSSR)

PRESENTED: September 16, 1959, by M. A. Leontovich, Academician

SUBMITTED: September 1, 1959

Card 4/4

11200

00722

S/182/60/000/010/005/006

A161/A029

AUTHOR:

Kolosov, V.M.

TITLE:

Universal Twelve-Position Rotary Block for Elementwise Group Pressing of Sheet Parts

PERIODICAL:

Kuznechno-shtampovoye proizvodstvo, 1960, No. 10, pp. 41 - 43

TEXT:

Cold stamping of parts from sheet metal by the "group method" consists in using either universal dies for element-wise stamping, or group blocks for attaching quickly replaceable dies, or universal electromagnetic blocks for laminated dies, or multiposition rotary punching and program-controlled presses. The article gives design and operation description of a multiposition (multi-punch) universal block for punching operations, which is the most interesting and practical design type. The idea was of V.M. Isayev, Chief Production Engineer of a Leningrad works, and leading engineer for stamping N.F. Chufarov; the designer is A.V. Glazkov. A photo of the block is given (Fig. 1). It is designed for parts of up to 300 x 600 mm size from up to 2.5-mm thick metal and is recommended for experimental piece, or small-lot production. Twelve standard work packets (dies) for cutting out differently shaped part elements (or whole parts) can be installed simultaneously and

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A161/A029

Universal Twelve-Position Rotary Block for Elementwise Group Pressing of Sheet Parts

and quickly replaced. A detailed drawing (Fig. 2) shows the design. The rod (2) is pressed into the bottom base (15); the steel bushing (9) with pressed-in ball bearing (16) is set on the rod (which has a thread on the top); the bushing rests through the bearing on the base and rotates freely on the rod. The rotation of the bushing is transmitted through a key to the die-holder (14) and the top base (11) set with snug fit on the bushing. Twelve seats for dies are bored in the holder and in the top base concentrically to each other. A "work packet" consists of a bed die (13), punch (12) and lifter (22). The bed dies are fixed by pins and screws (21), and the punches in the holders (10) by screws (8); the work position of the punches is fixed by pins. The punch holders end with T-heads in the seats in the top base, move on keys and are retained in the end position (neutral) by the disk (4), and in work position by the trunnion (6) that is attached in the press slider and is provided with a T-shaped slot. Two fasteners (7) on the disk (4) are for holding the punch holders, or (when moved to the block center) for removal of the holders. Parts to be worked are installed in place with the use of mobile carriages (17) and (18) running on the table (19) that is attached to the bottom base of the block. The part is fastened to the carriage by three screws. The spring fixer (20) is for setting the bed die holder and the top base into work

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Universal Twelve-Position Rotary Block for Elementwise Group Pressing of Sheet Parts

position. The table (19) can turn left and right on the bottom base, is fastened in place by three screws and makes possible cutting out of the elements in a part at different angles to the axis. The table is fitted with rulers, the carriage with noniuses, and the bottom base with divisions. Three different procedures are possible. In the first, the part is fixed on the carriage with three screws, and only the "packet" and the coordination by the rulers is changed. The work sequence is: coordinating the part to the packet No. 1 (Fig. 3,a), cutting out the element, moving packet No. 2 into position, coordinating the part to it, cutting out the element (Fig. 3,b), etc. In the second procedure, all parts of a batch are pushed in sequence to the packet No. 1 and the element is cut out. After the element has been cut out in all the parts of the batch, the packet No. 2 is brought into work position, etc. The third procedure consists in cutting out one and the same element in sequence (or a part) in parts attached on the carriage, and using the nonius to hold the step. It is stated that the application of the described block permits the number of the presses used to be reduced from 7 or 12 down to only one; it permits large parts of high thickness to be worked and the parts quickly to be reset toward the packet by the carriages. The manufacturing costs

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of the work packets can be cut to the minimum, i.e., 40 - 45 rubles. The block is to be installed stationary on a cam press of 25-ton pressure with a minimum slider travel of 8 - 12 mm, no less than 215 mm space between the press frame and the slider axis, and no less than 300 mm between the press table and the top limit position of the slider (open height). The use of programming is possible. There are 5 figures.

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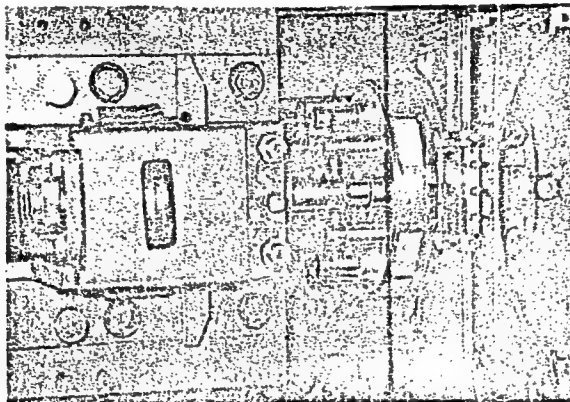
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A161/A029

Universal Twelve-Position Rotary Block for Elementwise Group Pressing Of Sheet Parts

Figure 1:

General View of the Universal Rotary Block on the Press



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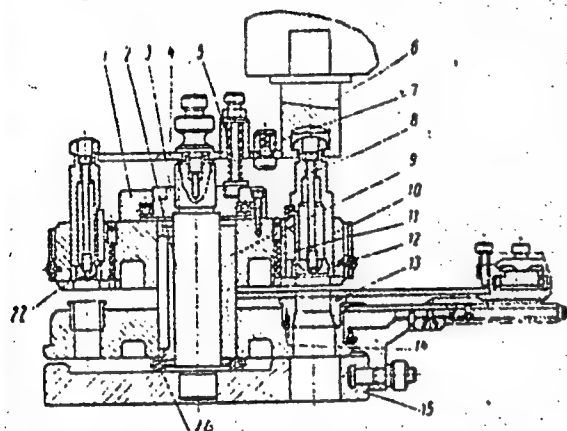
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Universal Twelve-Position Rotary Block for Elementwise Group Pressing of Sheet Parts

Figure 2:

Design of the Universal Rotary Block



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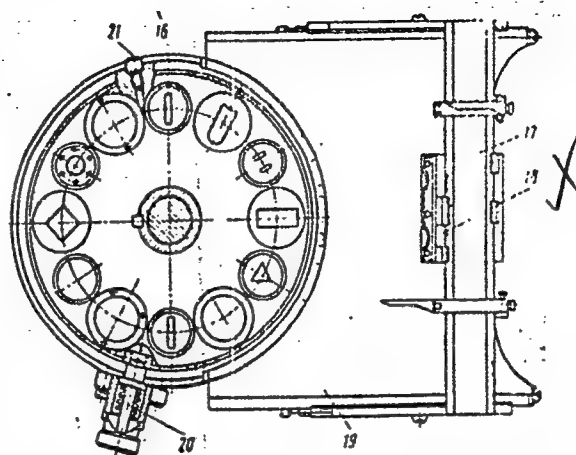


Рис. 2. Конструкция универсально-карусельного блока.

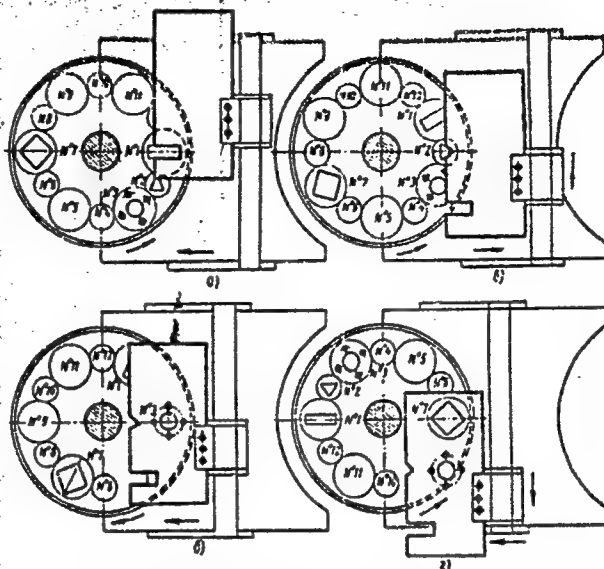
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A161/A029

Universal Twelve-Position Rotary
Block for Elementwise Group
Pressing of Sheet Parts

Figure 3:

Diagram of Machining of Parts on
the Block (1st variant)



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Рис. 3. Схема обработки деталей на блоке (первый вариант).

S/182/61/000/003/009/009
A161/A133

AUTHOR: Kolosov, V. M.

TITLE: Multipurpose block for quick-change dies

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 3, 1961, 39 - 41

TEXT: The described multipurpose block has been designed for the fastening of quick-change blanking dies (plate dies) of successive action for small-lot production of complex parts stamped by the gang method from strip metal (steel, non-ferrous metals or alloys) of 0.1 to 3 mm thickness. The work dies are replaced without removing the block from the press. The block has a top and a bottom base joined with two guide posts. The fixing elements for the top part of the work die are cams, bolts, and a pin. The bottom base has a dropping aperture 60 by 60 mm large, a seat for the bottom part of the work die set, and guide grooves for the clamping wedges. The wedges are screwed to a special screw and retained in the grooves by a shock-absorbing hook with a spring. The wedges, the special screw and the hook are the fixing elements. The work set (plate die) is fitted with either a fixed or mobile remover-clamp, and is produced especially for stamping one part only. The changing of the work die sets is described in detail. The multipurpose

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Multipurpose block for quick-change dies

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block shown in illustrations is used in a cam press of 30 ton capacity. Six of the kind of different dimensions have been fabricated. There are 3 figures.

Card 2/2

KOLOSOF, V.M.

Universal block for rapid-change dies. Kuz.-shtam. proizv. 3
no.3:39-41 Mr '61. (MIRA 14:6)
(Sheet-metal work)

KOLOSOV, V.M.

Dies for trimming the edges of hollow parts. Kuz.-shtam, proizv. 6
no. 1:44-45 Ja '64. (MIRA 17:3)

KOLOSOV, V.M.; SYURIN, V.N.

Experimental variability of Newcastle disease viruses. Vop.
virus 9 no.4:443-451 JI-Ag '64. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
virusologii i mikrobiologii Ministerstva sel'skogo khozyaystva
SSSR, Moskva.

IVANOVA, G.A.; SAFONOV, G.A.; KOLOSOV, V.M.; STURIN, V.N.

Differential diagnosis of Newcastle disease and European
chicken plague. Veterinaria 42 no.8:17-20 Ag '65.

(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut
veterinarnoy virusologii i mikrobiologii.

L 18720-66 ET(1)/T JK
 ACC NR: AP5023728 (A) SOURCE CODE: UR/0346/65/000/008/0017/0020
 AUTHOR: Ivanova, G. A.; Safonov, G. A.; Kolosov, V. M.; Syurin, V. N.
 ORG: All Union Scientific Research Institute of Veterinary Virology
 and Microbiology (Vsesoyuznyy nauchno-issledovatel'skiy institut
 veterinarnoy virusologii i mikrobiologii)
 TITLE: Differential diagnosis of New Castle disease (pseudoplague) and
 classical fowl plague_{6.446}
 SOURCE: Veterinariya, no. 8, 1965, 17-20 23
 TOPIC TAGS: fowl plague, animal disease, virus B
 ABSTRACT: New Castle disease and plague in chickens, turkeys and
 guinea hens are commonly considered to be the same disease because their
 clinical symptoms are similar. However, the viruses of these two
 diseases are completely different in their immunobiological, antigenic,
 pathogenic, hemagglutinative, and enzyme properties. The paper
 discusses laboratory diagnostic tests for differentiating the two
 diseases including cross-reaction immunity test, hemagglutination
 inhibition tests and neutralization tests. Also, methods of isolating
 the viruses and methods of determining their pathogenic and hemagglutina-
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UDC: None

Card 1/2

L 18720-66

ACC NR: AP5023728

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tive properties physically (heat and photodynamics), chemically
(formaldehyde and nitric acid), and biologically (inhibitors) are
discussed. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 002

Card 2/2 SNU

SHUKHOV, Yuriy Vladimirovich; YELENIN, Sergey Alekseyevich;
GOLOVLEV, V.D., nauchn. red.; KOLOSOV, V.N., red.;
DORODNOVA, L.A., tekhn. red.

[Sheet-metal work and cold forging] Kholodnaia shtampovka.
Moskva, Proftekhizdat, 1963. 274 p. (MIRA 17:1)
(Sheet-metal work) (Forging)

PRISEDSKIY, Viktor Dmitriyevich; MITROFANOV, A.M., nauchn. red.;
KOLOSOV, V.N., red.

[Safety measures in work with toxic chemicals] Tekhnika
bezopasnosti pri rabote s iadokhimikatami. Moskva,
Vysshaia shkola, 1965. 58 p. (MIRA 18:8)

SOSNENKO, Mikhail Nikolayevich; IVANOV, V.N., nauchnyy red.; KOLOSOV,
V.N., red.; TOKER, A.M., tekhn. red.

[Operator of molding machines] Formovshchik mashinnoi for-
movki. Izd.2., perer. i dop. Moskva, Proftekhizdat, 1963.
299 p. (MIRA 16:8)

(Machine molding (Founding))

CHERNYAK, Viktor Samuilovich; VOSHCHANOV, Konstantin Pavlovich;
ZVEGINTSEVA, K.V., nauchnyy red.; KOLOSOV, V.N., red.;
NESMYSLOVA, L.M., tekhn. red.

[A young welder's manual] Spravochnik molodogo svarshchika.
Izd.3., perer. i dop. Moskva, Proftekhizdat, 1963. 527 p.
(MIRA 16:7)

(Welding--Handbooks, manuals, etc.)

GRUZDEV, Aleksey Nikolayevich; KOLOSOV, V.N., red.; ABOLEMOV,
V.P., red.

[Mechanized coremaking for foundry molds] Mekhanizirovan-
noe izgotovlenie sterzhnei dlia liteinykh form. Moskva,
Vysshaya shkola, 1965. 293 p. (MIRA 18:2)

S/096/63/000/004/005/010
E194/E455

AUTHORS: Gel'man, L.I., Candidate of Technical Sciences,
Kolosov, V.V., Candidate of Technical Sciences,
Tyul'nev, I.I., Engineer

TITLE: Heat circuits of binary mercury-water nuclear power
stations

PERIODICAL: Teploenergetika, no.4, 1963, 49-52

TEXT: The binary mercury-steam cycle promises higher thermal efficiency of nuclear power stations, although mercury can only be used directly in a fast neutron reactor: in other types an additional heat-transfer medium is required. A thermal block diagram is suggested of a power station with an output of 180 MW. Of this, the mercury set working at an evaporation rate of 4015 t/hour generates 80 MW; the steam set generates 100 MW with steam conditions of 35 atm, and 435°C, obtained by a combination of cooling water from the mercury condenser and feed-water heating from the mercury turbine. Because of the interdependence of the mercury and steam circuit conditions it is quite a complicated matter to select the optimum cycle. The overall thermal

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Heat circuits of binary ...

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E194/E455

efficiency is affected by the number of steam superheaters and on the positions from which the mercury vapor is tapped to heat them. This problem is investigated theoretically by formulating a balance of the work that can be obtained from the cycle, allowing for the quantity of heat used. Comparisons can then be made between equipments with various numbers of super-heaters, and the best positions of the tapping points determined. By way of example, a binary cycle is considered with a steam turbine of 100 MW, steam conditions of 90 atm, 535°C, feed-water temperature 220°C, and mercury vapor at 236 atm, 600°C, with a pressure of 0.6 atm in the mercury condenser. The use of additional mercury superheaters gives diminishing advantages and their number should not exceed 3. Indeed, the transition from two to three superheaters increases the overall efficiency by less than 1% and considerably complicates the heat circuit, so that the best number of steam superheaters is 2. The first tapping point should be in the penultimate stage of the turbine; the second should be in the stage whose mercury vapor conditions are such that the steam can be heated to the required temperature. In this case the

Card 2/3

Heat circuits of binary ...

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E194/E455

efficiency of the mercury part of the installation is about 7% higher than in the case of single stage superheat. A factor which limits the potential use of mercury in nuclear power stations is the low critical heat flux which, for magnesium amalgams is of the order of 4×10^5 kcal/m²hour. Further experimental work is required for solving the problem of intensifying heat exchange of boiling mercury. Loadings of 1.6×10^6 kcal/m²hour have been obtained in the laboratory. The use of a binary mercury/steam cycle can raise the overall efficiency of nuclear power stations to 45 to 51%, which is much higher than the efficiency obtained with other heat-transfer media and so the method is, in principle, promising. There are 3 figures and 1 table.

Card 3/3

INYUTKIN, A.; KOLOSOV, Ye.; OSNACH, L.; KHABAROVA, V.; KHABAROV, E.;
SHARAVSKIY, P.

Studies of solid solutions on the basis of compounds of the
types $A^{III}B^V$ and $A^{II}B^{VI}$. Izv. AN SSSR. Ser. fiz. 28 no.6:1010-
1016 Je '64. (MIRA 17:7)

1. Kafedra fiziki Leningradskogo inzhenerno-stroitel'nogo
instituta.

34
Complex apparatus for the production of highly volatile semiconducting compounds. Ye. Kolosov. (Leningrad Institute of Engineering Materials).

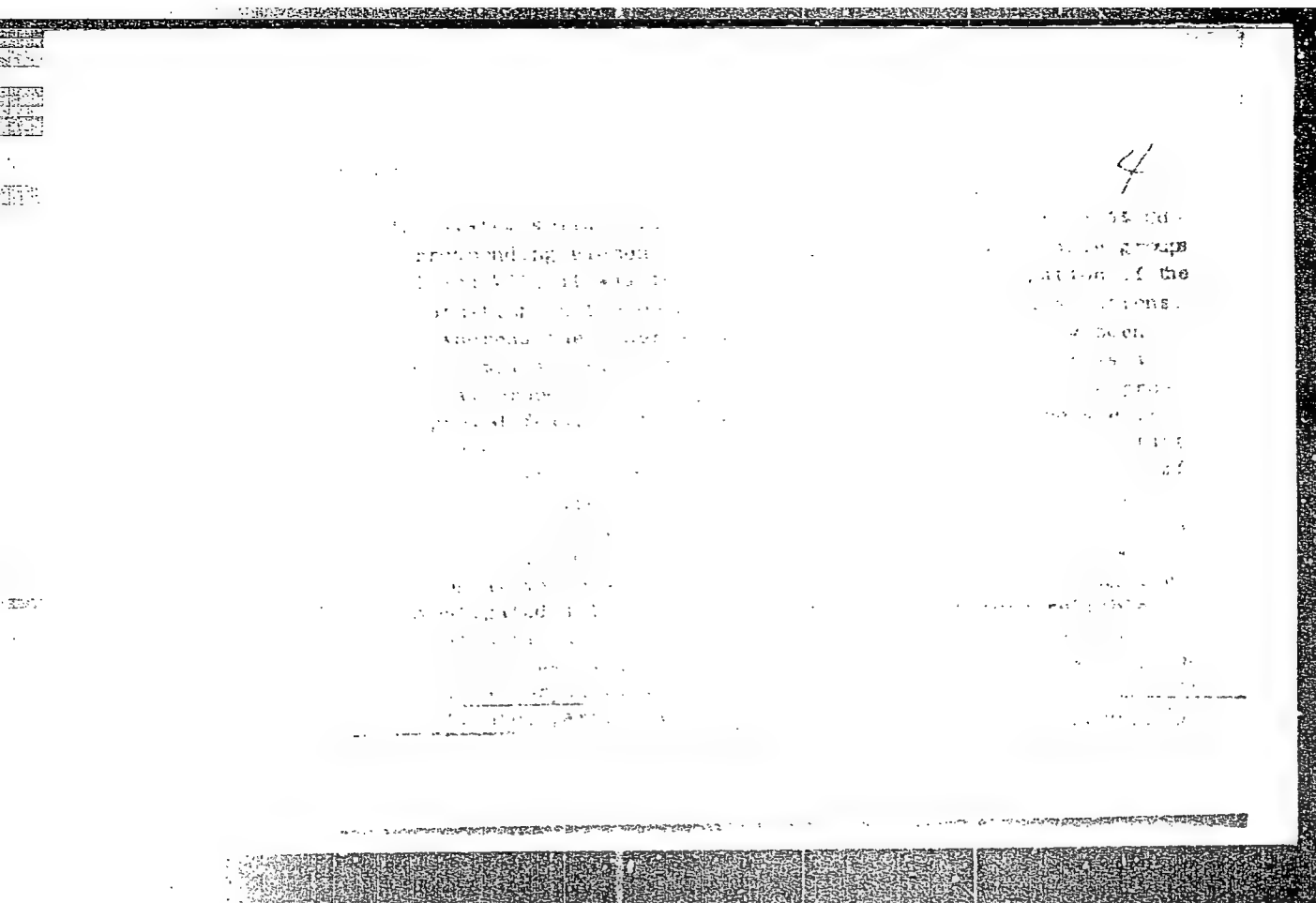
On solid solutions of the system HgTe-InAs. L. A. Osnach, P. V. Sharavskiy.

On interatomic forces of bonds in solid solutions of HgTe-InAs.
D. I. Inyutkin, P. V. Sharavskiy.

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

1. Kolosov, Ye.; Osnach, L.; Khabarova, V.; Khabarov, A. *Soviet Radio* 1977

ABSTRACT: Until recently the principal semiconductor materials were elementary, i.e., Ge and Si, and transition to even binary compounds appeared to be fraught with theoretical and practical difficulties. Now binary compounds are being increasingly



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KOLOSOV, Ye.N., aspirant

Representing populated areas on topographic maps. Izv. vys. ucheb. zav.; geod. i aerof. no.4:89-96 '64.

(MIRA 18:2)

1. Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i kartografii. Rekomendovana kafedroy sostavleniya i redaktirovaniya.

KOLOSOV, Ye.N.

Activity of the Moscow Society of Hygienists. Gig. i san. no. 12:
52 D '53. (MLRA 6:12)

(Public health--Societies)

3(2)

AUTHOR:

Kolosov, Ye. N

SOV/6-59-8-11/27

TITLE:

Representation of Settlements in Mountain and High-mountain
Regions on Topographic Maps of a Scale of 1 : 25,000
(Izobrazheniye na topograficheskikh kartakh masshtaba
1 : 25,000 naselennykh punktov v gornyykh i vysokogornyykh
rayonakh)

PERIODICAL:

Geodeziya i kartografiya, 1959, Nr 8, pp 45-50 (USSR)

ABSTRACT:

In the present paper a survey is given of the variety of
settlements in the mountain regions of the Caucasus with
reference to planning, built-up areas, form and width of
streets, timber and stone structures, distribution of the
individual buildings, population, and area covered, and the
difficulties encountered by the topographer in representing
them on topographic maps is pointed out. Recommendations for
individual cases are made. The typical feature of the settle-
ments in the West Caucasus (Abkhaziya, Imeretiya, Guriya, Mingreliya)
is the fact that buildings are scattered, the distances between
houses amounting to 100 - 150 m and more. Houses are made of
wood and are two-storied. At the transition from the lowland

Card 1/3

Representation of Settlements in Mountain and High-mountain Regions on Topographic Maps of a Scale of 1 : 25,000

SOV/6-59-8-11/27

plains to the foothills the distance between houses is reduced to 50-60 m. - In high-mountain and upland regions in the West Caucasus (Svanetiya, Racha, Osetiya, Kabardino-Balkariya) the villages are to be found in the valleys on the river terraces. Houses are close together. They are of stone or wood. In all parts of the Caucasus region they are surrounded by gardens and vineyards. In this connection recommendations are made for the correct representation of both houses and gardens on the maps. The mountain regions of the East Caucasus are more easily accessible than the West Caucasus, and thus more densely populated. Settlements are situated not only along the valleys but also on terraces and wide plateaus (Armyanskoye Highlands, Khunzakhskoye Plateau, Gunibskoye Plateau, etc.). Settlements in the Dagestan, Checheno-Ingushetiya, Karabakh, Armyanskoye Highland, and in the mountain regions of East Gruzija are typical of mountain settlements characterized by continuous lines of houses. Rather frequently the roof of one house serves as the courtyard of another. Almost all buildings are made of stone, there are no yards, the fields belonging to the farms are situated outside the village. It is typical of these places that all houses face southward. In Khevsuretiya (East Gruzija) some

Card 2/3

Representation of Settlements in Mountain and High-mountain Regions on Topographic Maps of a Scale of 1 : 25,000

SOV/6-59-8-11/27

people live in rocks, in caves, which do not appear on topographical photos or under the stereoscope. The lay-out of the villages varies greatly: unsystematic settlements, settlements with block subdivisions, the latter being distinguished as to whether they are to be found in the plains or in the mountains. Recommendations are made for the representation of ancient historic buildings and ruins as they are very frequent in the Caucasus: churches, mosques, castle towers, monuments, as well as for the representation of the many alpine sheds, Kutan (living quarters of herdsmen), barns, farms, spas, workers' housing developments near mines, and hydroelectric stations. - In conclusion it is stated that the existing subdivisions of settlements do not take account of the great variety of the same and do not answer the many questions connected with them. It is demanded that definite regulations be issued covering all existing variations of settlements. In this work the services of field editors would be of essential importance. There are 4 figures.

Card 3/3

BELIKOVA, V.P.; KOLOSOV, Ye.N.

Epidemiological characteristics of a water-borne outbreak of
dysentery and some data on the immunology of dysentery. Zhur.
mikrobiol.epid.i immun. 31 no.9:125-130 S '60. (MIRA 13:11)

1. Iz Sanitarno-epidemiologicheskoy stantsii, Podol'sk.
(DYSENTERY) (WATER—MICROBIOLOGY)

L 2207-66 ENT(1)/T IJP(c) GG

ACCESSION NR: AP5017339

33 UR/91B1/65/001/001/2247/2249
27B

AUTHOR: Kolosov, Ye. Ye.; Sharavskiy, P. V.

TITLE: On the thermal emf and thermal conductivity of mercury telluride with different impurity contents 21, 44, 55, 27 27

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 2247-2249

TOPIC TAGS: mercury compound, telluride, thermal emf, thermal conduction, impurity conductivity

ABSTRACT: The authors present the results of an investigation of the dependence of the thermal emf and thermal conductivity of p-type HgTe samples with different impurity contents in the interval from 140 to 340K for the thermal emf and from 90 to 430K for the thermal conductivity. Seven samples whose electric characteristics were described by the authors earlier (collection "Fizika," p. 31, 1965) were investigated. The measurement apparatus was described by D. Kh. Amirkhanova and R. I. Bashirov (FTT v. 2, 5097, 1960). The thermal conductivity was measured by an absolute stationary method. The measurements were made in vacuum of $\sim 10^{-4}$ mm Hg. The thermal emf was measured simultaneously with the conductivity. The measured thermal emfs of the individual samples agreed with those expected of material of p-type. The thermal conductivity was found to be determined principally by thermal

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L 2207-66

ACCESSION NR: AF5017339

conductivity of the crystal lattice, and independent of the concentration of the acceptor impurities in the investigated interval of concentrations. The thermal resistance increases linearly with the temperature in the interval 90--370K, after which its growth slows down, probably because of the appearance of a new heat transfer mechanism. "The authors thank Ye. D. Devyatkov for a discussion of this work." Orig. art. has: 2 figures. 6

ASSOCIATION: Leningradskiy inzhenerno-stroitel'nyy institut (Leningrad Construction Engineering Institute) 44.55

SUBMITTED: 26Feb65

ENCL: 00

SUB CODE: SS, TD

NR REF SOV: 006

OTHER: 004

Card 2/2 *DP*

KOLOSOV, Ye.Ye., polkovnik v otstavke

Development of Russian artillery in the first quarter of
the 18th century. Sbor.dokl.Voen.ist.sek. no.3:98-115
'60. (MIRA 15:9)

(Russia--Army--Artillery)

L 09021-67 EMT(1)/EMT(m)/EMP(t)/ETI IJP(c) JD/JG
ACC NR: ARG019910 SOURCE CODE: UR/0275/66/000/002/B008/B008

AUTHOR: Kolosov, Ye. Ye.; Sharavskiy, P. V.

TITLE: Effect of the magnetic field on certain electrical characteristics of HgTe with various carrier concentrations

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 2B64

REF SOURCE: Sb. Fizika. Dokl. k XXIII Nauchn. konferentsii Leningr. inzh.-stroit. in-ta, L., 1965, 31-34

TOPIC TAGS: Hall coefficient, magnetic field, electric conductivity, carrier concentration, electron hole

ABSTRACT: The dependence of the Hall coefficient and the conductivity on the magnetic field in the 4 to 20 kilooersteds interval at temperatures of 294°K and 77°K for p-type specimens with a concentration of 10^{17} to 10^{21} cm⁻³ at 77°K was investigated experimentally. Various concentrations were arrived at by the introduction of an additional quantity of Hg. At 294°K the Hall coefficient does not depend on the carrier concentration and magnetic field, the conductivity decreases with increase in the magnetic field, and the magnetic resistive coefficient increases. At 77°K the conductivity of the specimens with large carrier concentration does not depend on the magnetic field, and decreases with increase in the field so far as the

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UDC: 539.293:546.24'49:537.312.8

L 09221-67

ACC NR: AR6019910

other specimens are concerned. In order to explain the results it must be assumed that slow and fast holes exist, and that the electron and hole relaxation times are not dependent on the energy. N. Zh. [Translation of abstract]

SUB CODE: 20, 07

Card 2/2

KOLOSOV, Ye. Ye.

Dissertation defended for the degree of Candidate of Historical Science
in the Institute of History

"Reorganization of Russian Artillery in Relation to the Military Reforms of
the First Quarter of the XVIII Century."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

L 45517-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AR6025786

SOURCE CODE: UR/0058/66/000/004/EO74/EO74

AUTHOR: Kolosov, Ye. Ye.

TITLE: Influence of a magnetic field on certain thermal characteristics of mercury telluride

SOURCE: Ref. zh. Fizika, Abs. 4E574

REF SOURCE: Sb. Issled. po matem. i eksperim. fiz. i mekhan. L., 1965, 153-158

TOPIC TAGS: mercury compound, telluride, magnetic field, Nernst effect, Etingshausen effect, temperature dependence, thermal conduction, impurity scattering

ABSTRACT: The dependence of the longitudinal Nernst-Etingshausen (NE) effect and of the Maggi-Righi-Leduc (MRL) effect on the magnetic field intensity ($0 < H < 20$ kOe) was investigated in HgTe in the temperature interval 180-340K. The HgTe samples had p-type concentration with impurity density from 3×10^{17} to 10^{20} cm⁻³. The dependence of the MRL effect on H did not change with temperature and was the same for samples with different impurity densities, and this, in the author's opinion, is evidence of the smallness of the electronic component of the thermal conductivity. The dependence of the longitudinal NE effect on H at $T < 250$ K in weak fields turned out to be quadratic, in accordance with the predictions of the theory. The behavior of the NE coefficient at $T > 290$ K indicates that lattice scattering predominates in HgTe in this temperature region. R. Vinetskiy. [Translation of abstract]

SUB CODE: 20

Card 1/1

L 15729-66 EWT(1)/EWT(m)/ETC(f)/EWC(m)/T/EWP(t)/EWP(b) IJP(c) RDN/JD/JG/AT
 ACC NR: AP6000887 SOURCE CODE: UR/0181/65/007/012/3679/3681

AUTHOR: Kolosov, Ye. Ye.; Sharavskiy, P. V.

ORG: Leningrad Engineering-Construction Institute (Leningradskiy inzhenerno-stroitel'nyy institut)

TITLE: Dependence of the ^{21, 44, 55}thermoelectric power on the ^{21, 44, 55}transverse magnetic field in HgTe

SOURCE: Fizika tverdogo tela, v. 7, no. 12, 1965, 3679-3681

TOPIC TAGS: mercury compound, telluride, thermoelectric power, carrier density, Hall coefficient, impurity scattering, transverse magnetic field

ABSTRACT: The thermoelectric power was measured in p-type HgTe with different carrier density as a function of the transverse magnetic field (0--20 koe) at different temperatures from 180 to 340K. The samples, apparatus, and test procedure were the same as in an earlier study (FTT, v. 7, 2247, 1965). The three samples measured had carrier densities 3×10^{17} , 1×10^{18} , and $1 \times 10^{20} \text{ cm}^{-3}$, and were in the form of rectangular parallelepipeds $(13\text{--}16) \times (5\text{--}6) \times (4\text{--}5) \text{ mm}$, consisting of several single crystals. At low temperatures (188K) the thermoelectric power decreased with increasing magnetic field and its sign reversed in the case of two samples (Fig. 1). This suggests that HgTe contains also light holes, as suggested earlier in the analysis of the dependence of the Hall coefficient on the magnetic field. The results also show that the variation of the thermoelectric power with the magnetic field is sensitive to the presence of acceptor impurities. This in turn indicates that the

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SUB CODE: 20/

SUM DATE: 09/18/2001

Card 2/2

KOLOSOV, Yu., inzh.; RADIN, G., inzh.

Machinery unit with a self-loading conveyer. Sov.shakht.
10 no.12:13 D '61. (MIRA 14:12)

(Conveying machinery)
(Donets Basin--Mine haulage)

ACCESSION NR: AP4024063

S/0048/64/028/002/0377/0383

AUTHOR: Vil'dgrube, G.S.; Ronkin, Zh.M.; Kolosov, Yu.A.

TITLE: Time and pulse parameters of "zalyuzi" (louvered dynode) series photomultipliers Report, Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev 25 Jan to 2 Feb 1963

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 377-383

TOPIC TAGS: photomultiplier, louvered photomultiplier, photomultiplier time parameter, photomultiplier pulse parameter, photomultiplier characteristics

ABSTRACT: "Zalyuzi" series (louvered dynode type) photomultipliers are now successfully used for investigating short-lived processes. Photomultipliers used for investigation of fast processes must have, in addition to a short rise time and a short output pulse, a small electron transit time straggle in the dynode system and weak dependence of the output parameters on the voltage distribution over the dynodes. The present investigation was undertaken in view of the fact that there is some confusion regarding the performance characteristics of different Soviet and foreign photomultipliers. The purpose of the work was to investigate and measure the rise

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ACCESSION NR: AP4024063

time, the pulse duration, the transit time, the straggle of the transit time, and side effects in the case of multipliers of the "zalyuzi" type to determine the dependence of these parameters on the supply conditions. The measurements were carried out using "standard" instruments now being commercially produced by Soviet industry. The measurements were carried out by two procedures: rapid oscillographing and the procedure of measurement of the pulse rise in a fast coincidence system. In general, the results obtained by the two procedures are consistent. Measurements were carried out on some 1 to 20 samples of the domestic photomultipliers designated FEU-11, FEU-12, FEU-13, FEU-14, FEU-15, FEU-16, FEU-33, FEU-36, FEU-49 and FEU-52, and on the following photomultipliers of foreign manufacture: RCA-6810, RCA-6342 and EM1-9558. Some typical oscillograms are reproduced. Data obtained on the pulse rise time (steepness of the leading edge) and the smearing out (straggling) of the electron beam in the dynode system are presented in tables. A figure shows curves characterizing the variation in the amplitude of the output pulse with variation of the voltage on the ninth dynode. The results of the other measurements are discussed in general terms and the different photomultipliers are compared. Measurements show that as regards steepness of the leading edge of the output pulse the Soviet FEU-13, FEU-14, FEU-15 and FEU-16 photomultipliers are equal to the best foreign

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ACCESSION NR: AP4024063

(and other domestic) tubes owing to the high amplitude of the output signal. Analysis of the experimental data as a whole indicates that smearing out of the electron packet occurs primarily in the dynode system. Research is now being carried on to improve this characteristic, i.e., to reduce the electron transit straggling. Orig. art.has: 2 formulas, 5 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: GE

NR REF SOV: 003

OTHER: 000

Card 3/3

L 07956-67 EWT(m) DJ

ACC NR: AP6033495

SOURCE CODE: UR/0413/66/000/018/0117/0117

INVENTOR: Kolosov, Yu. A. ; Naroditskaya, Yu. I.

8
B

ORG: none

TITLE: Hydraulic mechanism for balancing rotors. Class 42, No. 186173

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 18, 1966, 117

TOPIC TAGS: rotor, rotor balancing, balancing mechanism

ABSTRACT: An Author Certificate has been issued describing a hydraulic mechanism for balancing in motion rotors, containing an internal bushing with ribs along a generating line and an external bushing—both fixed on the rotor pivots; the operating chambers are provided with seals. To achieve an automatic balancing of the inflexible and flexible rotors while in operation, reverse valves are installed at the operating chambers intake, and each operating chamber is provided with a servomechanism and a release valve, which is controlled by the servomechanism; the pressure is controlled from the radially opposed operating chamber through a pipeline, connecting each chamber with the servomechanisms of the radially

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UDC: 621.828:533.695.8